

**REMARKS**

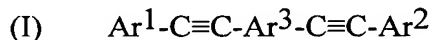
Entry of the foregoing and reconsideration of the application identified in caption, as amended, pursuant to and consistent with 37 C.F.R. §1.114 and in light of the remarks which follow, are respectfully requested.

By the above amendments, claims 2-5 and 7 have been canceled without prejudice or disclaimer. The subject matter of canceled claim 2 has been incorporated into each of claims 1, 17 and 19. Dependent claims 6 and 8 have been amended in light of the above amendment of claim 1. New independent claim 24 has been added which is directed to an optical film, and recites that "at least one of the aromatic groups of Ar<sup>1</sup>, Ar<sup>2</sup> and Ar<sup>3</sup> is an aromatic heterocyclic group." Support for new claim 24 can be found at least in original claim 1, taken in connection with the specification at page 8, lines 17 and 18, and page 13, lines 2-4. New dependent claims 25-45 are directed to additional aspects, and directly or indirectly depend from claim 24. New claims 25-45 are supported by the instant specification for at least the same reasons as original claims 3-16, 20-23 and 17-19, respectively. Entry of the above amendments is proper in light of the Request for Continued Examination being filed herewith. See 37 C.F.R. §1.114.

In the Official Action, claims 1-21 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,751,388 (*Larson*) in view of U.S. Patent No. 6,149,837 (*Sekine et al*). Claims 22 and 23 stand rejected under 35 U.S.C. §103(a) as being obvious over *Larson* in view of *Sekine et al*, and further in view of U.S. Patent No. 5,672,296 (*Shen et al*). Withdrawal of these rejections is respectfully requested for at least the following reasons.

Claim 1 is directed to an optical film comprising a transparent support and a linearly polarizing layer which selectively transmits polarized light and which selectively reflects or

scatters other polarized light, wherein the linearly polarizing layer contains a liquid crystal compound represented by the following formula (I), wherein the compound has a fixed alignment:



in which each of Ar<sup>1</sup> and Ar<sup>2</sup> independently is a monovalent aromatic hydrocarbon group, and Ar<sup>3</sup> is a divalent aromatic hydrocarbon group.

*Larson* relates to the field of polarized displays (col. 1, line 4). *Larson* discloses a polarization sensitive scattering element (PSSE) having a uniaxial homogeneously-aligned polymer dispersed liquid crystal (PDLC) structure (col. 6, lines 22 and 23).

*Larson* does not disclose or suggest each feature recited in claim 1. For example, *Larson* does not disclose or suggest a linearly polarizing layer containing a liquid crystal compound represented by formula (I), as recited in claim 1. This deficiency of *Larson* is acknowledged by the Patent Office at page 3 of the Official Action dated November 22, 2004.

The standard for maintaining a rejection under 35 U.S.C. §103(a) based on an alleged combination of prior art references is well established. For the Patent Office to properly combine references, there must be some suggestion or motivation to combine the reference teachings. M.P.E.P. §2142. The prior art must suggest the desirability of the claimed invention. Even if a claimed invention is within the capabilities of one of ordinary skill in the art, this is not sufficient by itself to establish *prima facie* obviousness. M.P.E.P. §2143.01.

In the present case, one of ordinary skill in the art would not have been motivated to modify *Larson* by employing the liquid crystal compound disclosed by *Sekine et al.* In view of *Larson's* reference to the polymer liquid crystal structure disclosed by U.S. Patent No. 4,685,771 (*West et al.*), one would not have been motivated to employ the *Sekine et al* liquid

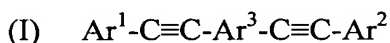
crystal compound, which has a completely different structure than that disclosed by *West et al.* That is, *Larson* already discloses the liquid crystal compound to be used in the polarization sensitive scattering element thereof, and the *Sekine et al* compound does not correspond to such compound. Simply put, one of ordinary skill in the art would not have been motivated to (1) ignore *Larson's* disclosure of employing the compound disclosed by *West et al*, and (2) instead employ the completely different liquid crystal compound of *Sekine et al.* Moreover, *Sekine et al* does not even relate to the use of a liquid crystal compound in a polarization sensitive scattering element (PSSE) as disclosed by *Larson*.

For at least the above reasons, it is apparent that *Larson* and *Sekine et al* do not fairly suggest the modification proposed by the Patent Office.

*Shen et al* relates to a polarizing film which possesses a polarizing efficiency of at least 70%, and comprises a blend of (a) a film-forming, wholly aromatic thermotropic liquid crystalline polymer and (b) a suitable dichroic dye (col. 2, lines 56-61).

*Shen et al* fails to cure the above-described deficiency of *Larson*. In this regard, the Patent Office has relied on *Shen et al* for disclosing the use of boric acid as a crosslinking agent (Official Action dated November 11, 2004 at page 11). However, like *Larson*, *Shen et al* does not disclose or suggest the liquid crystal compound represented by formula (I) recited in claim 1.

Independent claims 17 and 19 are directed to a polarizing plate and a liquid crystal display, respectively. Like claim 1, each of claims 17 and 19 recites a compound represented by the formula (I):



in which each of  $\text{Ar}^1$  and  $\text{Ar}^2$  independently is a monovalent aromatic hydrocarbon group, and  $\text{Ar}^3$  is a divalent aromatic hydrocarbon group. As such, it is respectfully submitted that

claims 17 and 19 are allowable over the applied art for at least the same reasons discussed above with respect to claim 1.

For at least the above reasons, it is apparent that no *prima facie* case of obviousness has been established. Accordingly, withdrawal of the §103(a) rejections is respectfully requested.

New independent claims 24, 43 and 45 are further distinguishable from the applied art at least in light of the recitation that in the formula (I) compound, at least one of the aromatic groups of Ar<sup>1</sup>, Ar<sup>2</sup> and Ar<sup>3</sup> is an aromatic heterocyclic group. By comparison, the compound disclosed by *Sekine et al* does not contain an aromatic heterocyclic group at any of the positions corresponding to Ar<sup>1</sup>, Ar<sup>2</sup> and Ar<sup>3</sup>.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

BUCHANAN INGERSOLL PC (INCLUDING ATTORNEYS  
FROM BURNS, DOANE, SWECKER & MATHIS)

Date: October 24, 2005

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